

## **AMENDMENTS TO THE SPECIFICATION:**

Page 7, please amend paragraph number [29] as follows:

In certain modes of engine operation, such as with the Miller cycle operation to be discussed in further detail herein, the valve stems 46 can be alternatively pushed against the springs 56 to thereby open the exhaust valves 34. More specifically, a valve actuator 70 may be used to so open the exhaust valves 34. As shown in FIGS. 3-5, one example of the valve actuator 70 includes an actuator cylinder 72 in which an actuator piston 74 is reciprocatingly disposed. The ~~actuator-piston-74~~ cylinder 72 may include an opening 79, through which an actuator rod 78 may extend in the direction of the valve stem 46 as well.

Page 12, please amend paragraph number [43] as follows:

FIG. 9 depicts, in graphical form, valve timing if Miller cycle benefits are to be achieved using the intake valve 32 instead of the exhaust valve 34. As can be seen, the intake valve 32 is held open or delayed in closing, in the depicted embodiment, for about half of the compression stroke, thereby reducing the compression ratio of the engine 20. The process by which such an engine 20 could function is depicted in flowchart format in FIG. 10. As shown therein, a first step is for the engine piston 24 to descend through the engine cylinder 22, as indicated by step 130. The intake valve 32 is then opened using the mechanically driven actuator or cam assembly 58 as indicated in step 132. In so doing, the turbocharger 99 is thereby able to inject cooled, turbocharged air as indicated in step 134. Continued rotation of the cam assembly 58 allows the spring 56 to partially close the intake valve 32 as indicated in a step 136. However, prior to the intake valve 32 fully closing, Miller cycle benefits can be obtained

by extending the closing of the intake valve 32. As shown in FIG. 10, a next step may therefore be to inquire whether Miller cycle is desired as indicated in step 138. If the inquiry is answered in the affirmative, a next step may be to determine the desired duration of the Miller cycle event as indicated in step 140. Once this duration is determined, the intake valve 32 can be held open using the fluidically driven actuator or valve actuator 70 as indicated above. This is indicated by step 142 in FIG. 10. Thereafter, the piston 24 continues to ascend as indicated in step 144, and after the duration determined in step 138, the intake valve 32 is completely closed as indicated in step 146. More specifically, the high pressure fluid can be disconnected from the actuator 70 thereby allowing the spring 56 to fully close the intake valve 32.